## WHAT IS CLAIMED IS:

 An optical waveguide module comprising an optical waveguide component having an auxiliary connection member connected to an end of an optical waveguide chip, and

at least one array member for attaching an end of at least one optical fiber to a connection member to be connected to said auxiliary connection member, wherein

said optical waveguide component and said array member are connected to each other via said auxiliary connection member and said connection member, and

an optical waveguide exposed from the end of said optical waveguide chip is in direct contact with a core of said optical fiber exposed from an end of said array member.

2. An optical waveguide module comprising an optical waveguide component having an auxiliary connection member connected to an end of an optical waveguide

at least one array member for attaching an end of at least one optical fiber to a connection member to be connected to said auxiliary connection member, wherein

said optical waveguide component and said array member are connected to each other via said auxiliary connection member and said connection member,

a presser member is disposed to press at least one of said optical waveguide chip and said optical fiber in a direction of connection, and

an optical waveguide exposed from the end of said optical waveguide chip is in direct contact with a core of said optical fiber exposed from an end of said array member.

3. The optical waveguide module according to claim 2, wherein

said presser member is disposed across the connection

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chip, and

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between said optical waveguide chip and said optical fiber.

4. The optical waveguide module according to claim 2, wherein

said presser member is provided on said array member.

5. The optical waveguide module according to claim 2, wherein

said array member allows a region around the core including the core of said optical fiber to project from an end face of said connection member.

6. The optical waveguide module according to claim 5, wherein

said optical fiber has an outer peripheral edge being cut away.

7. The optical waveguide module according to claim 5, wherein

said optical fiber has said region around the core being reduced in diameter relative to a diameter of a cladding and/or a center of said region around the core is made eccentric with respect to a center of an outer periphery of said cladding, said region around the core being projected in each case.

8. The optical waveguide module according to claim 6, wherein

said optical fiber has said region around the core being reduced in diameter relative to a diameter of a cladding and/or a center of said region around the core is made eccentric with respect to a center of an outer periphery of said cladding, said region around the core being projected in each case.

9. The optical waveguide module according to claim  $^{5}$ , wherein

said optical waveguide component and said array member are protruded so as to prevent said projecting optical fiber from contacting with said auxiliary connection member.

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10. The optical waveguide module according to claim 6, wherein

said optical waveguide component and said array member are protruded so as to prevent said projecting optical fiber from contacting with said auxiliary connection member.

11. The optical waveguide module according to claim 5, wherein

a glass layer is interposed in between said auxiliary connection member and said optical waveguide chip so as to prevent the region around the core of said optical fiber from contacting with said auxiliary connection member.

12. The optical waveguide module according to claim 6, wherein

a glass layer is interposed in between said auxiliary connection member and said optical waveguide chip so as to prevent the region around the core of said optical fiber from contacting with said auxiliary connection member.

13. The optical waveguide medule according to claim 2,

said optical waveguide component is formed so as to allow a region around said optical waveguide including said optical waveguide to project from the other part.

14. The optical waveguide module according to claim 2, wherein

said optical waveguide component has said auxiliary connection member bonded thereto by means of an adhesive layer  $20\mu m$  or less in thickness.

15. The optical waveguide module according to claim 2, wherein

in the connection between said optical waveguide component and said array member, an optical signal passing through where the optical waveguide formed in said optical waveguide component is in direct contact with the core of said optical fiber has a maximum power of 300mW or more per

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port.

16. An optical waveguide module comprising

a first array member with a plurality of optical fibers having ends attached to a first connection member,

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a second array member with at least one optical fiber having an end attached to a second connection member, and

an optical waveguide chip having an input and output end face and an optical waveguide for multiplexing a plurality of optical signals having different wavelengths inputted from a plurality of input ports to output a resulting optical signal from at least one output port,

said optical waveguide module wherein

said first array member is bonded with an adhesive to said input end face of said optical waveguide chip,

an auxiliary connection member is attached to said output end face of said optical waveguide chip,

said second connection member is connected to said auxiliary connection member,

said second array member is coupled to said output end face of said optical waveguide chip via said second connection member and said auxiliary connection member,

a presser member for pressing said auxiliary connection member and said second array member in a direction of connection is disposed across said auxiliary connection member and said second array member, and

a core of said optical waveguide exposed from said output end face of said optical waveguide chip is in direct contact with a core of said optical fiber exposed from an end of said second array member.

17. The optical waveguide module according to claim 16, wherein

said presser member is disposed across connections between said optical waveguide chip and said first array member and between said optical waveguide chip and said

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second array member.

18. The optical waveguide module according to claim 16, wherein

an optical signal passing through where the core of said optical waveguide is in direct contact with the core of said optical fiber has a maximum power of 300mW or more per port.

19. The optical waveguide module according to claim 16,

an optical signal passing through where the core of said optical waveguide is in direct contact with the core of said optical fiber has a maximum power of 300mW or more per port at said input end face, and

an optical signal passing through where the core of said optical waveguide is in direct contact with the core of said optical fiber has a maximum power of 300mW or more per port at said output end face.

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